

Claims

1-47 (Canceled)

48. **(Original)** An improved tumble drum for mixing a food product with another food product, the tumble drum comprising:

a rotating tumble drum for rotating the product and the another food product;
a tumbler drive motor for rotating the tumble drum; and
another drive motor for reciprocating the tumble drum linearly in a slow forward/backward manner to slide product along the tumble drum and thereby discharge the product from the tumble drum.

49. **(Original)** The improved tumble drum as defined in Claim 48, further comprising:

a product tray driven to move food product longitudinally along the product tray;
and

the rotating tumble drum being fixed to the product tray such that the drive mechanism linearly moves both the tumble drum and the product tray in a slow forward/backward manner to move product along both the product tray and the rotating tumble drum.

50. **(Original)** The improved tumble drum as defined in Claim 49, further comprising:

a sensor for sensing an upper level product moving along the product tray and producing product feed signal function related to the volume of product being conveyed along the product tray; and

powering the drive mechanism in response to the product feed rate signal.

51. **(Original)** The improved tumble drum as defined in Claim 48, further comprising:

a spray mechanism for spraying product with the another food product within the tumble drum.

52. **(Original)** The improved tumble drum as defined in Claim 48, further comprising:

a plastic material liner for fitting within the tumble drum.

53. **(Original)** The improved tumble drum as defined in Claim 52, wherein: the plastic material liner includes a plurality of inwardly projecting ribs each having first and second flight surfaces for tumbling the rotating product as a function of the rotational direction of the tumbler drive motor.

54. **(Original)** An improved liner for a tumble drum, comprising:
a generally sleeve-shaped tumbler drum body;
a plurality of circumferentially spaced ribs each fixed to the body, each rib having first and second flight surfaces for tumbling the rotating product as a function of the rotational direction of a tumbler drive motor.

55-82 (Canceled)

83. **(Original)** A method of mixing a food product with another food product, the method comprising:

rotating the product and the another food product in a tumble drum; and reciprocating the tumble drum linearly in a slow forward/backward manner to slide product along the tumble drum and thereby discharge the product from the tumble drum.

84. **(Original)** The method as defined in Claim 83, further comprising:
driving a product tray to move the product longitudinally along the product tray;
and

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fixing the tumble drum to the product tray such that both the tumble drum and the product tray move in a slow forward/backward manner to mov product along both the product tray and the tumble drum.

85. **(Original)** The method as defined n Claim 84, further comprising:
sensing an upper level product moving along the product tray and producing
product feed signal function related to the volume of product being conveyed along the
product tray; and

powering the drive mechanism in response to the product feed rate signal.

86. **(Original)** The method as defined in Claim 83, further comprising:
spraying the product with a liquid.

87-97 **(Canceled)**